

Does SMCRA provide for/require groundwater standards? If so, where are they in the regs. and/or statute? What, in fact, are they? How do they line up with MCLs (as opposed to effluent limits for surface water)?

No, SMCRA does not establish ground water standards, in the sense of MCLs. SMCRA was enacted to “protect society and the environment from the adverse effects of surface coal mining operations” (30 U.S.C. 1202 sec. 102). The SMCRA-based regulations use the individual permits to control the environmental impacts associated with coal mining using specified information requirements and performance standards prescribing the acceptable degree of impact as a result of coal mining activities.

Surface coal mining is very “interactive” with the environment. Which is a kind way to say mining can be disruptive, even destructive to water-bearing aquifers as the ground is removed to reach the coal. The permitting process requires companies to state how all problem areas will be controlled during mining and restored through reclamation. SMCRA-based regulations emphasize restoring land use, minimizing impacts within the permit and preventing unacceptable impacts outside the permit area, and protecting or replacing water rights (subject to existing State water rights laws). .

SMCRA provides for ground-water protection through: 1) the Federal and State regulations that apply, 2) the determination of probable hydrologic consequences (PHC) required from the operator as part of the permit application and 3) the cumulative hydrologic impact assessment (CHIA) done by the coal mining regulatory authority as part of the review process leading to permit approval or permit denial. These hydrologic analyses are required for every permit application.

Some pertinent regulations follow:

30 CFR 816.41(a) “All surface mining and reclamation activities shall be conducted to minimize disturbance of the hydrologic balance within the permit and adjacent areas, to prevent material damage to the hydrologic balance outside the permit area, to assure the protection or replacement of water rights, and to support approved postmining land uses in accordance with the terms and conditions of the approved permit and the performance standards of this part. The regulatory authority may require additional preventative, remedial, or monitoring measures to assure that material damage to the hydrologic balance outside the permit area is prevented. Mining and reclamation practices that minimize water pollution and changes in flow shall be used in preference to water treatment.”

30 CFR 780.21(i)(2) “The plan shall provide for the monitoring of parameters that relate to the suitability of the ground water for current and approved postmining land uses and to the objectives for protection of the hydrologic balance set forth in paragraph (h) of this section. It shall identify the quantity and quality parameters to be monitored, sampling frequency, and site locations. It shall describe how the data may be used to determine the impacts of the operation upon the hydrologic balance. At a minimum, total dissolved solids or specific conductance corrected to 25 °C, pH, total iron, total manganese, and water levels shall be monitored and data submitted to the regulatory authority at least every 3 months for each monitoring location. The regulatory authority may require additional monitoring.”

30 CFR 780.21(e) “If the PHC determination required by paragraph (f) of this section indicates that the proposed mining operation may proximately result in contamination, diminution, or interruption of an underground or surface source of water within the proposed permit or adjacent areas which is used for domestic, agricultural, industrial or other legitimate purpose, then the application shall contain information on water availability and alternative water sources, including the suitability of alternative water sources for existing premining uses and approved postmining land uses.”

How do they line up with MCLs (as opposed to effluent limits for surface water)?

MCLs are reference tools in dealing with water resources, especially drinking quality water. In areas of past and present coal mining, water quality often does not meet the drinking water standards. The specific water criteria for an individual permit is based on collected background data for the local hydrology and water quality that is specific to that coal mining permit. SMCRA-based regulations start with the collected local data for hydrology and geology instead of drinking water standards. The specific water standards for each permit would be considered an alternate standard under RCRA-based regulations.

Water discharges from a permit must still meet effluent limits set by other State and Federal standards as acknowledged in SMCRA-based regulations. But, there are exceptions for remining, western alkaline coal mining, and the background water quality levels.

Some pertinent regulations follow:

30 CFR 780.21(h) The hydrologic reclamation...“plan shall be specific to the local hydrologic conditions. It shall contain the steps to be taken during mining and reclamation through bond release to minimize disturbances to the hydrologic balance within the permit and adjacent areas; to prevent material damage outside the permit area; to meet applicable Federal and State water quality laws and regulations; and to protect the rights of present water users. The plan shall include the measures to be taken to: Avoid acid or toxic drainage; prevent, to the extent possible using the best technology currently available, additional contributions of suspended solids to streamflow; provide water-treatment facilities when needed; control drainage; restore approximate premining recharge capacity and protect or replace rights of present water users. The plan shall specifically address [any] potential adverse hydrologic consequences identified in the PHC determination... and shall include preventive and remedial measures.”

30 CFR 816.42 “Discharges of water from areas disturbed by surface mining activities shall be made in compliance with all applicable State and Federal water quality laws and regulations and with the effluent limitations for coal mining promulgated by the U.S. Environmental Protection Agency set forth in 40 CFR part 434.”

30 U.S.C.1292 sec. 702(a) “Nothing in this Act shall be construed as superseding, amending, modifying, or repealing... the National Environmental Policy Act of 1969 (42 U.S.C.4321-47), or any of the following Acts or with any rule or regulation promulgated thereunder, including, but not limited to -... (3) The Federal Water Pollution Control Act (79 Stat. 903), as amended (33 U.S.C. 1151-1175), the State laws enacted pursuant thereto, or other Federal laws relating to preservation of water quality....”